



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,399	11/26/2001	Bruce C. Monk	AT-1	7853

7590 09/16/2004
Joseph E. Funk
PO Box 661
Londonderry, NH 03053

EXAMINER

CARTER, AARON W

ART UNIT PAPER NUMBER

2625

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,399

Applicant(s)

MONK ET AL.

Examiner

Aaron W Carter

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 11-13, 31 and 33-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11-13, 31 and 33-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 6, 2004 has been entered.

Response to Amendment

2. In response to applicant's amendment received on August 6, 2004, all requested changes to the specification and claims have been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 1-5, 11-13, 31 and 33-37 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1, 2, 11, 13, 31, 33, 35 and 37 are rejected under 35 U.S.C. 102(a) as being anticipated by USPN 6,269,169 to Funk et al. ("Funk") (already of record).

As to claim 1, Funk discloses a method for automatically processing paper, plastic and electronic documents of many different classes and types that are randomly presented to first identify the class of each document, then identify the type of document within an identified class of documents (column 3, lines 46-57), the method comprising of:

(a) capturing a complete image of an entire document that is presented to be identified (Fig. 4, elements 31 and 32, column 4, lines 21-22 and column 5, lines 15-24, wherein the document is fully inserted in to the reader and an image is taken and stored);

(b) determining a first characteristic for each document presented to be identified using its complete image captured in step (a), the first characteristic being used to identify one class of document from another class of document (Fig. 4, element 35, 36, 37, 58 and 59 and column 9, lines 16-24, wherein the complete image is check for the presence of MRZ corresponding to determining first characteristics and depending on whether MRZ's are present the documents class is identified as such);

(c) retrieving a set of second characteristics for each document presented to be identified whose complete image is captured in step (a) and whose class of document is identified in step (b), the second set of characteristics being used to identify the type of document from amongst the class of documents identified in step (b) (Fig. 4, elements 60 and 38, column 9, lines 34-42, and column 11, lines 35-47, wherein attributes in the library corresponds to set of second characteristics);

(d) analyzing individual characteristics from the second set of characteristics retrieved in step (c) with characteristics actually in the complete document image captured in step (a) to identify the type of object from amongst the class of objects

Art Unit: 2625

identified in step (b) (Fig. 4, elements 37, 38, 43, 59, 60 and 61, Fig. 4A, elements 44 and 62, column 9, lines 43-56 and column 11, lines 48-61).

As to claim 33, Funk discloses the method for automatically processing documents according to claim 1, where identified documents are to be verified, and further comprising the steps of:

(e) retrieving a set of reference information unique to each type of document that is identified in step (d) (Fig. 4A, elements 64 and 47, column 10, lines 12-16 and column 12, lines 17-21); and

(f) analyzing each document whose image is captured in step (a) using the unique set of reference information retrieved in step (e) to verify if the type of document identified in step (d) is genuine, counterfeit, or has been altered (Fig. 4A, elements 48, 49, 65 and 66, column 10, lines 16-19 and column 12, lines 21-23).

As to claim 2, Funk discloses the method in accordance with claim 33 further comprising the step of

(g) providing an indication that a document is genuine, counterfeit or has been altered based upon the results of analysis performed in step (f) (Fig. 4A, elements 46, 49, 50, 66 and 67).

As to claim 11, please refer to the rejections made for claim 1 above.

As to claim 35, please refer to the rejections made for claim 33 above.

As to claim 13, please refer to the rejections made for claim 2 above.

Art Unit: 2625

As to claim 31, please refer to the rejections made for claim 1 above.

As to claim 37, please refer to the rejections made for claim 33 above.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funk in view of USPN 5,992,601 to Mennie et al. ("Mennie") (already of record).

As to claim 3, Funk discloses the method in accordance with claim 1, wherein a full image of the document is captured.

Funk does not disclose expressly wherein the determination of a first characteristic performed in step (b) is to determine the size of a document being processed, all documents that may be identified and verified are divided into size ranges and each class of documents includes all documents having the same size.

However, Mennie discloses determining the size of a document being processed wherein all documents that may be identified and verified are divided into size ranges and each class of documents includes (column 17, lines 20-41).

Funk & Mennie are combinable because they are both from the same art of image processing and more specifically they both deal with processes of efficiently classifying and identifying documents.

Art Unit: 2625

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to take the process of determining the size of a document in an effort to limit possible matches for identification as taught by Mennie and combine it with the automatic paper processing method disclosed by Funk.

The suggestion/motivation for doing so would have been to limit the potential identity of a document to other documents of similar size, inherently making the process more efficient (column 17, lines 36-37).

Therefore, it would have been obvious to combine Funk with Mennie to obtain the invention as specified in claim 3.

As to claim 4, the combination of Funk and Mennie disclose the method in accordance with claim 3, wherein the second set of characteristics retrieved in step (c) include color patterns at specific locations on documents (column 22, lines 3-17, wherein in an effort to further limit potential identity of a document, Mennie, further narrows the list by acquiring color patterns from the document and comparing them to a set of characteristic associated with the size of the document being processed).

8. Claims 5, 12, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funk as applied to claims 1 and 11 above, and further in view of USPN 5,933,526 to Sklarew.

Funk discloses the method for automatically processing objects in accordance with claims 1 and 11.

Funk does not expressly disclose the steps of:

(h) ordering all types of documents that are identified in step (d) from the most commonly identified type of documents to the least commonly identified type of document

(i) selecting the retrieved characteristics from step (c) for use in step (d) starting with characteristics for the most commonly identified type of document and progressing to the least commonly identified type of document.

Sklarew teaches a method of identification in which characteristic of the objects to be identified are compared to characteristic of known objects in a database/memory (Fig. 7 and column 14, lines 10-14). Sklarew goes on to teach us to that the most frequently identified objects are the first to be compared with the objects to be identified (column 14, lines 17-20, and Fig. 7, element 120).

Funk & Sklarew are combinable because they are from they are both in the field of identifying objects using image processing. The lesson taught by Sklarew is completely compatible and usable with the identification method of Funk.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the invention of Funk with the teachings of Sklarew.

The suggestion/motivation for doing so would have been providing the invention of Funk with the ability to keep track of the most commonly identified objects and starting the comparison step with that objects characteristics, providing the invention with the advantage of increased performance by reducing the time to determine a match (Sklarew, column 14, lines 19-20).

Art Unit: 2625

Therefore, it would have been obvious to combine Funk with Sklarew to obtain the invention as specified in claims 5 and 12.

As to claims 34 and 36 please refer to the rejections made for claims 33, 35 and 37 above.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron W Carter whose telephone number is (703) 306-4060. The examiner can normally be reached on 7am - 3:30 am (Mon. - Fri.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AWC
awc



**BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**